

A release-controlled pipe and a related manufacturing method comprise several main steps, which are mixing a formulation, first hot melt extrusion and cooling, grinding into pieces, second hot melt extrusion, molding and cooling. The present invention includes the steps of first mixing elastomer pellets and a binder, then pouring the formulation into a melt extruder for extruding and shaping a rod-like extrudate. Then the rod-like extrudate is ground into pieces and placed into a water-filled container and another dry container. The mixture of dry ground pellets, wet ground pellets including water, and a small amount of lubricant is poured into a melt extruder for extruding, and a release-controlled pipe is shaped via a pipe die head and gathered by a winder after cooling.